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content in usable form in such other product;

- (6) Where such covered demodulator product outputs, or directs to be output, such content for the purpose of making a recording of such content pursuant to paragraph (b)(2) of this section, where such content is protected by the corresponding recording method; or
- (7) Where such covered demodulator product is incorporated into a computer product and passes, or directs to be passed, such content to an unprotected output operating in a mode compatible with the digital visual interface (DVI) rev. 1.0 Specification as an image having the visual equivalent of no more than 350,000 pixels per frame (e.g. an image with resolution of 720×480 pixels for a 4:3 (nonsquare pixel) aspect ratio), and 30 frames per second. Such an image may be attained by reducing resolution, such as by discarding, dithering or averaging pixels to obtain the specified value, and can be displayed using video processing techniques such as line doubling or sharpening to improve the perceived quality of the image.
- (b) A covered demodulator product shall not record or cause the recording of unscreened content in digital form unless such recording is made using one of the following methods:
- (1) A method that effectively and uniquely associates such recording with a single covered demodulator product (using a cryptographic protocol or other effective means) so that such recording cannot be accessed in usable form by another product except where the content of such recording is passed to another product as permitted under this subpart: or
- (2) An authorized recording method authorized for use with unscreened content in accordance with any applicable obligations established as a part of its approval pursuant to §73.9008 (provided that for recordings made on removable media, only authorized recording methods expressly approved pursuant to §73.9008 for use in connection with removable media may be used).
- (c) Paragraph (b) of this section does not impose restrictions regarding the

storage of unscreened content as a transitory image.

(d) The requirements of this section shall become applicable on July 1, 2005.

§ 73.9004 Compliance requirements for covered demodulator products: Marked content.

- (a) A covered demodulator product shall not pass, or direct to be passed, marked content to any output except:
 - (1) To an analog output;
- (2) To an 8-VSB, 16-VSB, 64-QAM or 256-QAM modulated output, provided that the broadcast flag is retained in the both the EIT and PMT;
- (3) To a digital output protected by an authorized digital output protection technology, in accordance with any applicable obligations established as a part of its approval pursuant to \$73.9008:
- (4) Where such covered demodulator product outputs, or directs to be output, such content to another product and such covered demodulator product exercises sole control (such as by using a cryptographic protocol), in compliance with the demodulator robustness requirements, over the access to such content in usable form in such other product:
- (5) Where such covered demodulator product outputs, or directs to be output, such content for the purpose of making a recording of such content pursuant to paragraph (b)(2) of this section, where such content is protected by the corresponding recording method: or
- (6) Where such covered demodulator product is incorporated into a computer product and passes, or directs to be passed, such content to an unprotected output operating in a mode compatible with the digital visual interface (DVI) Rev. 1.0 Specification as an image having the visual equivalent of no more than 350,000 pixels per frame (e.g., an image with resolution of 720×480 pixels for a 4:3 (nonsquare pixel) aspect ratio), and 30 frames per second. Such an image may be attained by reducing resolution, such as by discarding, dithering or averaging pixels to obtain the specified value, and can be displayed using video processing techniques such as line doubling or

sharpening to improve the perceived quality of the image.

- (b) A covered demodulator product shall not record or cause the recording of marked content in digital form unless such recording is made using one of the following methods:
- (1) A method that effectively and uniquely associates such recording with a single covered demodulator product (using a cryptographic protocol or other effective means) so that such recording cannot be accessed in usable form by another product except where the content of such recording is passed to another product as permitted under this subpart or
- (2) An authorized recording method in accordance with any applicable obligations established as a part of its approval pursuant to \$73.9008 (provided that for recordings made on removable media, only authorized recording methods expressly approved pursuant to \$73.9008 for use in connection with removable media may be used).
- (c) Paragraph (b) of this section does not impose restrictions regarding the storage of marked content as a transitory image.
- (d) The requirements of this section shall become applicable on July 1, 2005.

§ 73.9005 Compliance requirements for covered demodulator products: Audio.

Except as otherwise provided in §§73.9003(a) or 73.9004(a), covered demodulator products shall not output the audio portions of unscreened content or of marked content in digital form except in compressed audio format (such as AC3) or in linear PCM format in which the transmitted information is sampled at no more than 48 kHz and no more than 16 bits/sample. The requirements of this section shall become applicable on July 1, 2005.

§ 73.9006 Add-in covered demodulator products.

(a) Where a covered demodulator product passes unscreened content or marked content to another product, other than where such covered demodulator product passes, or direct such content to be passed to an output (e.g., where a demodulator add-in card in a personal computer passes such

content to an associated software application installed in the same computer), it shall pass such content:

- (1) Using a robust method; or
- (2) Protected by an authorized digital output protection technology authorized for such content in accordance with any applicable obligations established as a part of its approval pursuant to §73.9008. Neither unscreened content nor marked content may be so passed in unencrypted, compressed form via a User Accessible Bus.
- (b) The requirements of this section shall become applicable on July 1, 2005.

§73.9007 Robustness requirements for covered demodulator products.

The content protection requirements set forth in the demodulator compliance requirements shall be implemented in a reasonable method so that they cannot be defeated or circumvented merely by an ordinary user using generally-available tools or equipment. The requirements of this section shall become applicable on July 1, 2005.

NOTE TO §73.9007: Generally-available tools or equipment means tools or equipment that are widely available at a reasonable price, including but not limited to, screwdrivers, jumpers, clips and soldering irons. Generally-available tools or equipment also means specialized electronic tools or software tools that are widely available at a reasonable price, other than devices or technologies that are designed and made available for the specific purpose of bypassing or circumventing the protection technologies used to meet the requirements set forth in this subpart. Such specialized electronic tools or software tools includes, but is not limited to, EEPROM readers and writers, debuggers or decompilers.

§ 73.9008 Interim approval of authorized digital output protection technologies and authorized recording methods

(a) Certifications for digital output protection technologies and authorized recording methods. The proponent of a specific digital output protection technology or recording method seeking approval for use in covered demodulator products shall certify to the Commission that such digital output protection technology or recording method is appropriate for use in covered demodulator products to give effect to